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10/078,475	02/21/2002	Hideyuki Ban	HITA.0173	4858

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Stanley P. Fisher
Reed Smith Hazel & Thomas LLP
Suite 1400
3110 Fairview Park Drive
Falls Church, VA 22042-4503

EXAMINER
TOMASZEWSKI, MICHAEL

ART UNIT	PAPER NUMBER
3626	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/078,475	BAN
	Examiner	Art Unit	
	Mike Tomaszewski	3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>28 September 2006</u>.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-6,8-17 and 19-23</u> is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6,8-17 and 19-23</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s), _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>21 February 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　1.☐ Certified copies of the priority documents have been received.

　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application
6)☐ Other: _____.

DETAILED ACTION

Notice To Applicant

1.   This communication is in response to the amendment filed on 9/28/06. Claims 7

and 18 have been cancelled and claims 1 and 12 have been amended. Claims 1-6, 8-

17 and 19-23 are pending.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-6, 8-10, 12-17, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Summerell et al. (5,937,387; hereinafter Summerell), in view of

Campell et al. (6,059,724; hereinafter Campbell), and further in view of Jagger (Jagger,

Carol. "Health Expectancy Calculation by the Sullivan Method: A Practical Guide" Jun

13, 2001; hereinafter Jagger).

(A)   As per currently amended claim 1, Summerell discloses a health management

support method implemented in a computer-based data processing system for

generating life expectancy data to be used in a health management system, comprising:

(1)   providing a database for storing life expectancy prediction data that

represents transition of a percentage of normal people in each result of

health screening (Summerell: abstract; col. 8, lines 16-25; col. 11-16; Fig.

7-14); and

(2)   generating health screening report data for each person who undergoes

health screening by data entry means (Summerell: col. 8, line 50-55; Fig.

3); and

(3)   generating personal life expectancy prediction data by selecting at least

one of said life expectancy prediction data <u>from said database in</u>

<u>combination of at least one of daily living habits and one of decision result</u>

<u>s in</u> said inputted health screening report data (Summerell: abstract; col. 1,

lines 5-16).

Summerell, however, fails to *expressly* disclose a health management support

method implemented in a computer-based data processing system for generating life

expectancy data to be used in a health management system, comprising:

(4)   generating personal healthy life expectancy prediction data for each said

        person;

(5)   estimating a predicted period of healthy life expectancy of each said

        person by <u>selecting one of said healthy life expectancy data from said</u>

        <u>database in accordance with said at least one of daily living habits and</u>

        <u>said at least one of decision results in said health screening data of said</u>

        <u>person who undergoes health screening and</u> calculating based on said

        selected personal healthy life expectancy prediction data; <u>and</u>

(6)   outputting said estimated predicted period of healthy life expectancy of

        each said person.

Nevertheless, these features are old and well known in the art, as evidenced by

Campell. In particular, Campell discloses a health management support method

implemented in a computer-based data processing system for generating life

expectancy data to be used in a health management system, comprising:

(4)   generating personal healthy life expectancy prediction data (Jagger: pg. 4-

        5) for each said person (Campell: abstract; col. 4, lines 26-67; col. 5, lines

        1-62);

(5)   estimating a predicted period of healthy life expectancy (Jagger: pg. 4-5)

        of each said person by <u>selecting one of said healthy life expectancy data</u>

        <u>from said database in accordance with said at least one of daily living</u>

habits and said at least one of decision results in said health screening

data of said person who undergoes health screening and calculating

based on said selected personal healthy life expectancy prediction data

(Campell: abstract; col. 4, lines 26-67; col. 5, lines 1-62) (Examiner

considers the time period prior to the predicted time period correlating with

the onset of a health problem to read on "a predicted period of healthy life

expectancy."); and

(6) outputting said estimated predicted period of healthy life expectancy

(Jagger: pgs. 4-5) of each said person (Campell: abstract; col. 4, lines 26-

67; col. 5, lines 1-62; col. 9, lines 3-23).

One of ordinary skill would have found it obvious at the time of the invention to

combine the teachings of Campell with the teachings of Summerell with the motivation

of providing a means of predicting the onset of health problems (Campell: col. 4, lines

27-32).

One of ordinary skill would have found it obvious at the time of the invention to

combine the teachings of Jagger with the combined teachings of Summerell and

Campell with the motivation of providing a means of predicting the onset of heatlh

problems.

(B)   As per previously presented claim 2, Summerell discloses a health management

support method as recited in claim 1 further comprising:

a health management plan generation step which comprises generating health management plans for each said person who underwent health screening, based on the predicted value of healthy life expectancy of each said person (Summerell: col. 16, lines 51-67; col. 17, lines 1-27; Fig. 17-29).

(C)   As per previously presented claim 3, Summerell discloses a health management support method as recited in claim 2, wherein the health management plan generation step comprises generating health screening recommendation plans (Summerell: abstract; col. 16, lines 51-67; col. 17, lines 1-36; Fig. 18-29).

(D)   As per previously presented claim 4, Summerell discloses a health management support method as recited in claim 2, wherein the health management plan generation step further comprises generating healthy lifestyle practice recommendation plans for guiding each person in improving his or her living habits such as meals, exercise, and smoking (Summerell: abstract; col. 16, lines 51-67; col. 17, lines 1-36; Fig. 18-29).

(E)   As per previously presented claim 5, Summerell discloses a health management support method as recited in claim 4, further comprising:

a health management effect prediction step which comprises estimating change to the predicted period of healthy life expectancy of a person, wherein the

expected change is based on the person practicing life-style improvement

advised in a health management plan generated in the health management plan

generation step (Summerell: abstract; col. 16, lines 51-67; col. 17, lines 1-36; Fig.

18-22).

(F)   As per original claim 6, Summerell discloses a health management support

method as recited in claim 5, further comprising:

    (1)   a medical payment prediction step which comprises preparing medical

        payment prediction knowledge data beforehand as basic data for

        predicting medical payment from a diversity of healthy life expectancy and

        calculating change to medical payment predicted for a person who

        underwent health screening, based on the change to the predicted period

        of healthy life expectancy of the person estimated in the health

        management effect prediction step and through the use of the medical

        payment prediction knowledge data (Summerell: col. 4, lines 65-67; col. 5,

        lines 1-11).

(G)   As per original claim 8, Summerell discloses a health management support

method as recited in claim 1, further comprising:

(1)   a medical insurer management support step which comprises predicting

aggregate medical payment of a medical insurer as a whole, based on the

predicted period of healthy life expectancy of each assured person who is

a policyholder insured by the medical insurer (Summerell: col. 4, lines 65-

67; col. 5, lines 1-11).

(H)   As per previously presented claim 9, Summerell fails to *expressly* disclose the

health management support method according to claim 1, wherein said calculation is

performed by applying an equation

$$\sum_{x-1}^{\infty} Lx/Li$$

to select said healthy life expectancy prediction data when age of said person is i,

wherein *Lx* and *Li* are percents of normal people at age x and age i, respectively.

However, the above formula appears to be nothing more than a normalization

calculation. It is respectfully submitted that normalization techniques are old and well

known in the art (See col. 11, lines 50-59 and Fig. 8 of Summerell.)

One of ordinary skill would have found it obvious at the time of the invention to

substitute the normalization techniques of Summerell with the use of a particular

formula, such as that recited in claim 9, with the motivation of providing various options

to a measure that is statistically relevant (Summerell: col. 1, lines 44-63).

(I)   As per previously presented claim 10, Summerell discloses the health

management support method according to claim 1, wherein said healthy life expectancy

prediction data is generated by collecting health screening report data of a plurality of

person, collecting medical data comprised of medical services details, generating a

healthy life expectancy prediction data by calculating the percentage of the dead and

the percentage of people being sick or disabled for every age from said medical data,

and generating healthy life expectancy prediction data (Summerell: col. 9, lines 32-67;

col. 10, lines 1-50).

(J)   Claim 12 substantially repeats the same limitations as those in claim 1 and

therefore, is rejected for the same reasons given for claim 1 and incorporated herein.

(K)   Claims 13-17 and 19 substantially repeat the same limitations of claims 2-6 and 8

and therefore, are rejected for the same reasons given for those claims.

4.   Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Summerell, Campell, and Jagger, as applied to claim 1 above, and further in view of

Joao (6,283,761; hereinafter Joao).

(A)   As per previously presented claim 11, Summerell fails to *expressly* disclose the health management support method according to claim 10, wherein medical data has medical fee bill data.

Nevertheless, these features are old and well known in the art, as evidenced by Joao. In particular, Joao discloses the health management support method according to claim 10, wherein medical data has medical fee bill data (Joao: abstract; col. 16 – col. 19).

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Joao with the teachings of Summerell, Campell, and Jagger with the motivation of providing an apparatus and method for performing healthcare diagnoses (Joao: col. 8, lines 14-16).

5.   Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Summerell, Campell, and Jagger, as applied to claim 1 above, and further in view of Iliff (6,569,093; hereinafter Iliff) and further in view of Seare et al. (5,557,514; hereinafter Seare).

(A)   As per previously presented claim 20, Summerell fails to *expressly* discloses the health management support method as recited in claim 1, comprising:

(1)   calculating predicted duration of at least one of diseases and disability

based on said predicted period of said healthy life expectancy; and

(2)   calculating an aggregate of medical payments predicted for the at least

one of diseases and disability.

Nevertheless, these features are old and well known in the art, as evidenced by

Campell, Iliff and Seare. In particular, Campell, Iliff and Seare disclose the health

management support method as recited in claim 1, comprising:

(1)   calculating predicted duration of at least one of diseases and disability

(Iliff: col. 2, lines15-41) based on said predicted period of said healthy life

expectancy (Campell: abstract; col. 4, lines 26-67; col. 5, lines 1-62); and

(2)   calculating an aggregate of medical payments predicted for the at least

one of diseases and disability (Seare: abstract).

One of ordinary skill would have found it obvious at the time of the invention to

combine the teachings of Campell with the combined teachings of Summerell, Jagger,

Iliff and Seare with the motivation of providing a means of predicting the onset of health

problems (Campell: col. 4, lines 27-32).

One of ordinary skill would have found it obvious at the time of the invention to

combine the teachings of Iliff with the combined teachings of Summerell, Campell,

Jagger and Seare with the motivation of predicting a timeline (i.e., duration) of a disease or disability (Iliff: abstract).

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Seare with the combined teachings of Summerell, Campell, Jagger and Iliff with the motivation of predicting the cost associated with a diagnosis (Seare: abstract).

6.   Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Summerell, in view of Campell, in view of Jagger, and further in view of Joao (6,283,761; hereinafter Joao).

(A)   As per new claim 21, Summerell fails to *expressly* disclose the health management support method as recited in claim 1, further comprising:

    (1)   collecting medical fee bill data (Joao: col. 18, lines 1-21);

    (2)   sorting said medical fee bill data according to the results specified in the health screening report data (Joao: col. 18, lines 1-21);

    (3)   calculating the percentage of the dead and the percentage of people being sick or disabled for each age from said stored medical fee bill data (Joao: col. 18, lines 1-21); and

(4)   generating said healthy life expectancy prediction data corresponding to

the sorted results based on said calculation (Jagger: pgs. 4-5).

Nevertheless, these features are old and well known in the art, as evidenced by

Joao and Jagger. In particular, Joao and Jagger disclose the health management

support method as recited in claim 1, further comprising:

(1)   collecting medical fee bill data (Joao: col. 18, lines 1-21);

(2)   sorting said medical fee bill data according to the results specified in the

health screening report data (Joao: col. 18, lines 1-21);

(3)   calculating the percentage of the dead and the percentage of people being

sick or disabled for each age from said stored medical fee bill data (Joao:

col. 18, lines 1-21); and

(4)   generating said healthy life expectancy prediction data corresponding to

the sorted results based on said calculation (Jagger: pgs. 4-5).

One of ordinary skill would have found it obvious at the time of the invention to

combine the teachings of Joao with the combined teachings of Summerell, Campell and

Jagger with the motivation of providing a means of predicting the onset of heatlh

problems.

One of ordinary skill would have found it obvious at the time of the invention to

combine the teachings of Jagger with the combined teachings of Summerell, Campell

and Joao with the motivation of providing a means of predicting the onset of heatlh

problems.

(B)   As per new claim 22, Summerell fails to *expressly* disclose the health

management support   method as recited in claim 1, further comprising:

(1)   preparing medical payment prediction knowledge data as basic data for

predicting medical payment (Joao: col. 18, lines 1-21) from a diversity of

healthy life expectancy (Jagger: pgs. 4-5);

(2) .   calculating a predicting amount of future medical payment of the each

person who undergoes health screening () based on the predicted period

of healthy life expectancy of the each person and the medical payment

prediction knowledge data (Joao: col. 18, lines 1-21);

(3)   wherein a predicting amount of future medical payment is calculated by

the summation of multiplied value of the average medical expenses a

year per age by the correction coefficient depending on the recuperation

period (), for the predicted duration of disease and/or disability that is from

the predicted period healthy life expectancy to average life expectancy

(Jagger: pgs. 4-5).

Nevertheless, these features are old and well known in the art, as evidenced by Joao and Jagger. In particular, Joao and Jagger disclose the health management support method as recited in claim 1, further comprising:

(1)   preparing medical payment prediction knowledge data as basic data for predicting medical payment (Joao: col. 18, lines 1-21) from a diversity of healthy life expectancy (Jagger: pgs. 4-5);

(2)   calculating a predicting amount of future medical payment of the each person who undergoes health screening based on the predicted period of healthy life expectancy (Jagger: pgs. 4-5) of the each person and the medical payment prediction knowledge data (Joao: col. 18, lines 1-21);

(3)   wherein a predicting amount of future medical payment is calculated by the summation of multiplied value of the average medical expenses a year per age by the correction coefficient depending on the recuperation period (Joao: col. 18, lines 1-21), for the predicted duration of disease and/or disability that is from the predicted period healthy life expectancy to average life expectancy (Jagger: pgs. 4-5).

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Joao with the combined teachings of Summerell, Campell and Jagger with the motivation of providing a means of predicting the onset of heatlh problems.

One of ordinary skill would have found it obvious at the time of the invention to combine the teachings of Jagger with the combined teachings of Summerell, Campell and Joao with the motivation of providing a means of predicting the onset of heatlh problems.

(C)   As per claim 23, Summerell discloses the health management support method as recited in claim 1, wherein said daily living habit is at least one of smoke (Summerell: col. 4, lines 63-64).

Examiner has noted insofar as claim 23 recites "at least one of smoke, drink, and exercise, and said decision result is at least one ofhyper-tension, hyper-lipemia, and hyper-glycemia," smoke is recited.

Response to Arguments

7.   Applicant's arguments with respect to claims 1 and 12 have been considered but are moot in view of new ground(s) of rejection.

8.   Applicant's arguments filed 9/28/06 have been fully considered but are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 9/28/06.

(A)   On page 10 of the 9/28/06 response, Applicant argues that Summerell does not

show nor explicitly or implicitly suggest estimating a predicted period of healthy life

expectancy of each person.

In response, Examiner notes that the teachings of Jagger, rather than

Summerell, were relied upon to address these limitations. For example, Jagger teaches

predicting healthy life expectancy (Jagger: pgs. 4-5).

(B)   On page 10 of the 9/28/06 response, Applicant argues that Campell does not

show using living habits such as smoking, drinking and exercise to estimate relative

probability and even any relation between biomarkers and daily living habits.

In response, Examiner notes that the teachings of Summerell, rather than

Campell, were relied upon to address these limitations. For example, Summerell

teaches the use of living habits such as smoking to predict health (Summerell: col. 4,

lines 63-64).

(C)   On pages 10-11 of the 9/28/06 response, Applicant argues that there is no

suggestion or motivation to combine the teaching of Campell with the teaching of

Summerell.

In response to applicant's argument that there is no suggestion to combine the

references, the examiner recognizes that obviousness can only be established by

combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re*

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Examiner

respectfully submits that the motivation provided by the Examiner (i.e., providing a

means of predicting the onset of health problems (Campell: col. 4, lines 27-32) would be

a sufficient impetus to prompt one of ordinary skill to combine the teachings of Campell

with the teachings of Summerell.

(D)   Applicant's remaining arguments of the 9/28/06 response rely upon or re-hash

the issues addressed above and therefore are moot in view of the responses given

above and incorporated herein.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the
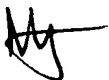
shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mike Tomaszewski whose telephone number is

(571)272-8117. The examiner can normally be reached on M-F 7:00 am - 3:30 pm.

    If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph Thomas can be reached on (571)272-6776. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

    Information regarding the status of an application may be obtained from the

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USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MT

C. LUKE GILLIGAN
PATENT EXAMINER